

1 *Meaning-making, the process of how individuals make sense of knowledge, experience, relationships, and the self, must be considered in designing college curricular environments supportive of learning and development.*

Meaning-Making in the Learning and Teaching Process

Michael Ignelzi

Robert Kegan, whose theory of meaning-making is the focus of this chapter, relates a story told to him by a mother about her preschool-age son. The son, named Johnny, comes to his mother one day and tells her he needs some cow toenails. Living in the suburbs, the mother's first thought is how in the world she will obtain cow toenails, but she is even more intrigued by why her son needs these items. When she asks, Johnny informs her that he is starting a farm and wants to plant the cow toenails to grow some cows. Mom's initial thought is the confirming sense of how inventive and cute her son is. Upon reflection, however, she decides that since Johnny raised the issue, it might be a good time to teach him a little about "the birds and the bees" (or in this case, "the cows"). After telling him a few basic facts about reproduction, she says, "So you see, Johnny, *that* is where baby cows really come from." Johnny, who had been listening intently, pauses for a few moments and then replies, "Not on my farm!"

Children, who tend to be very honest about what they are thinking and feeling as well as what they do and don't understand, often provide clear insights into truisms about how human beings function. Although this volume is dedicated to developmental considerations in the learning and teaching of college students, the story about Johnny illustrates some key developmental principles that are useful in considering how all humans experience and learn:

1. *Humans actively construct their own reality.* William Perry (1970) states that what an organism does is organize and what a human organism organizes is meaning. Kegan (1982, 1994) calls this process *meaning-making*.

Clearly, Johnny and his mother are making meaning in qualitatively different ways. In a sense, their understanding of reality resides on different "farms." We seem intuitively to understand that children and adults construct reality somewhat differently; however, we may not fully appreciate the extent to which adults can also make meaning in qualitatively different ways from each other.

2. *Meaning-making develops over time and experience.* Much of the reason Johnny and his mother construct their understanding of reality in different ways is due to their being at different points in their individual meaning-making development. Kegan views meaning-making as a process that continues to develop throughout one's life span. As Johnny grows and develops, he will move from his current "farm" (way of making-meaning) to new "farms," as may his mother as she continues to gain experience in her adult life.

3. *The process of learning and teaching is strongly influenced by the ways participants make meaning.* New experience and learning are interpreted through our current constructions of reality. When we are presented with information that doesn't fit our meaning-making, as Johnny did, we may discount or ignore it. Continuing to live on our "own farm" where we are comfortable and reasonably secure may at a given time look more desirable than moving to or even visiting that "new farm" down the road. Education isn't simply presenting more adequate information in an effective manner; it is a process that must incorporate the developmental readiness of the student (Johnson and Hooper, 1982) and must construct a developmental "bridge" between the student's current way of understanding and the new way, thus providing a path on which to cross over (Kegan, 1994).

This chapter provides an overview of Robert Kegan's theory of meaning-making development. It describes how individuals' understanding of their experience, of themselves, and of their interpersonal relationships evolves. The focus is on the portion of Kegan's model of self-evolution that describes the developmental transitions individuals face from adolescence through adulthood. Interview data are used to illustrate the theory and how it applies to the college learning and teaching process. Examples are given on how to assess students' developmental levels, along with suggestions on how faculty can support meaning-making development as a means of enhancing student learning.

Robert Kegan's Theory of Meaning-Making

Robert Kegan's theory of meaning-making development is a conceptualization of how human beings make meaning of themselves, of others, and of their experiences throughout the life span. Kegan (1982, 1994), along with other constructive developmental theorists (including Piaget, 1967;

Kohlberg, 1984; Baxter Magolda, 1992; and King and Kitchener, 1994), contends that individuals actively construct their own sense of reality. An event does not have a particular solitary meaning attached that simply gets transferred to the individual. Instead, meaning is created between the event and the individual's reaction to it. Kegan (1982) refers to this as "the zone of mediation"—"the place where the event is privately composed, made sense of, the place where it actually *becomes* an event for that person" (p. 2). This zone where meaning gets made is also referred to by personality psychologists as the self, the ego, or the person. Kegan states: "The activity of being a person is the activity of meaning-making. There is no feeling, no experience, no thought, no perception, independent of a meaning-making context in which it *becomes* a feeling, an experience, a thought, a perception, because *we are* the meaning-making context" (p. 11).

Kegan's theory examines how meaning-making evolves throughout the life span. His developmental approach suggests that the internal structure individuals use to organize meaning-making, and therefore the self, change and evolve in regular and systematic ways. The general course and direction of these changes are predictable over time and experience. Kegan's theory is ambitious in that he proposes that one developmental process (meaning-making) encompasses or accounts for the variety of changes humans go through over the course of their lives pertaining to how they make sense of experience, knowledge, each other, and themselves. Furthermore, he contends that there is consistency in an individual's meaning-making at any particular point in time, such that how one understands knowledge or experience is directly related to how one understands others and the self.

Orders of Consciousness. Kegan proposes a series of six holistic (each with its own internal logic) and qualitatively different forms of meaning-making that individuals may evolve through during their lifetime. He calls these major places along the path of self-evolution "orders of consciousness" and numbers them from 0 to 5 (Kegan, 1994). As a person's development proceeds between and through these orders, meaning-making undergoes changes that affect the person's view of the self, relations to others, and understanding of experience.

Kegan (1994) contends and research on his theory supports that the majority of the adult population (from late adolescence through adulthood) makes meaning at or between order 3 and order 4. The story of adult-meaning-making development seems to be largely described by the slow evolution of the self from order 3 to order 4. As such, it is useful in considering how meaning-making development affects learning and teaching in higher education, to examine the psychological characteristics of these two orders.

Order 3. Order 3 meaning-makers co-construct their sense of meaning with other persons and sources (books, ideas) in their environment. They are not psychologically differentiated from these "co-constructions." That is, the individual's sense of self is based on a *fusion* of others' expectations,

theories, and ideas, and those expectations become integrated into how one thinks about oneself. The individual's sense of meaning-making resides partly in other people and sources and partly within the self, so there is no coherent sense of meaning-making or self apart from those other people and sources. An order 3 meaning-maker is masterful at coordinating others' points of view and can create a shared reality with others but is limited in the ability to reflect on that shared reality and how it is influencing or determining the person's own view (Kegan, Noam, and Rogers, 1982). When an order 3 meaning-maker shares what she or he thinks, believes, or feels, another (person or source) is always implicated.

An example of order 3 meaning-making is illustrated by Mike, a graduate student, who discusses the influence of a particular counseling theory on his thinking when working with others (Ignelzi, 1994, p. 133):

I'm a Rogerian . . . like the Carl Rogers theory, you know. Client-centered theory and things like that. I believe in the empowerment of students and I believe . . . that it's important not to solve student problems but to help them solve problems for themselves. And that deals a lot with some of the theories that we learn in class and, of course, Rogers. So I think about that when dealing with students. I don't really think about it, but I think that those theories have become so much a part of me that they're almost innate, natural. . . . I think that's the framework that I'm in when I deal with students, and whatever style I'm developing, I think it is right off the heels of Rogers.

Mike's meaning-making is reflective of order 3 in that he uncritically adopts a particular theory that has come to guide his thinking and approach in his attempts to help other students. His philosophy, as he describes it, is co-constructed with an external source he accepts wholly without reflection or modification. He defines himself, at least in the counseling context, as fully identified with the Rogerian approach such that his view of himself as a counselor is indistinguishable from that approach.

Order 4. Order 4 meaning-makers construct their sense of meaning and the self such that self-authorship is the key feature. The order 4 individual transcends the co-constructed self of order 3 by developing the ability to differentiate a self-standard apart from, but in relation to, other people and sources. That is, the self can internalize multiple points of view, reflect on them, and construct them into one's own theory about oneself and one's experience. Thus the individual's meaning-making is influenced by but not determined by external sources. The self becomes identified through these self-authored conceptualizations, giving the self an enduring identity that remains fairly stable across contexts and interpersonal relationships.

An example of order 4 meaning-making is illustrated by Amanda, a recent M.A. graduate, who discusses how she is developing her own personal theory about how to make sense and use of theories and concepts she has studied (Ignelzi, 1994, pp. 218-219):

I like to think that there's a framework of some sort, that there are obviously principles and values and different ideas which are part of a lot of different theories that help shape the way I do things and the way I interact with people. I've certainly never been able, you know, not been a person who could even subscribe to one particular theory or theorist and say, "This is it." Because they are all far too limiting, and there are so many that I'm attracted to, and different facets and different things click with me. . . . I think what I liked so much about theory was the process of applying theory, was the whole process of self-discovery with each new theory, that made me, as we talked about a theory, where I had to think about my own life and my own experiences and see, you know, Does this fit? Does this not fit? And I think that it's a process for me, with all the theoretical experiences and like who I've become as a result of that and the different things that I've thought about. That's what I use the most. . . . So I think it's sort of an internalized, you know, inside there's your little self theory.

Amanda's meaning-making is reflective of order 4 in that she is self-authoring her own theory about how to interact with and help others in a counseling context. Though certain formal theories resonate with her more than others do, she reports being attracted to many or parts of many theories. The way she thinks about and uses these theories is highly personalized, based largely on her own values and experiences. Even if many of her ideas are influenced by various theoretical approaches, her understanding, organization, and use of them are determined by her own evolving theory about her work and herself.

"In over Our Heads" in the Learning and Teaching Environment

Given the two different forms of meaning-making (orders 3 and 4) illustrated by Mike and Amanda, it can be postulated that they experience and respond to college learning environments in contrasting ways. While Mike depends on his instructors, course concepts, and peers to co-construct and largely determine what he thinks and believes, Amanda internalizes these same sources to inform and influence (but not determine) her self-authored view. Mike has difficulty with and may not fully understand class assignments that require him to critique or evaluate conflicting perspectives on his own, while Amanda thrives on such learning opportunities. Amanda largely takes responsibility for her own learning, using available resources (professor, reading, peer discussion) in service of her own learning goals. Mike is likely to rely solely on learning goals and standards set by the professor and may hold the professor and others responsible for whether those goals are met. Amanda tends to view criticism of her ideas or work in relation to her own standards, and she ultimately decides their value to her self-authored views of knowledge and self; Mike is much more sensitive to and

affected by such constructive criticism because he co-constructs his ideas and sense of self with the same external sources from which the criticism may originate.

It is for these reasons, among others, that Kegan (1994) suggests that many college students may find themselves "in over their heads" in their learning environments. Kegan contends that there is a developmental mismatch between the meaning-making order of most college students—predominantly order 3—and the mental demands of contemporary learning culture—predominantly order 4. Consequently, students like Mike, similar to our preschooler Johnny, are residing on one "farm" while the learning and teaching life of the college are occurring on another.

Kegan reviewed much of the contemporary literature on adult education and found that what is being demanded of students' minds by most education specialists and college faculty requires order 4 meaning-making. Kegan summarized these demands on the mind, which he referred to as the "hidden curriculum," as follows:

- Exercise critical thinking.
- Be a self-directed learner (take initiative; set our own goals and standards; use experts, institutions, and other resources to pursue these goals; take responsibility for our direction and productivity in learning).
- See ourselves as the co-creators of the culture (rather than only shaped by culture).
- Read actively (rather than only receptively) with our own purpose in mind.
- Write to ourselves, and bring our teachers into our self-reflection (rather than write mainly to our teachers and for our teachers).
- Take charge of the concepts and theories of a course or discipline, marshaling on behalf of our independently chosen topic its internal procedures for formulating and validating knowledge [Kegan, 1994, p. 303].

Kegan contends that as curricular aspirations for students to work toward, these goals are important and developmentally sound. In fact, as King and Baxter Magolda (1996) suggest, "The achievement of self-authorship and personal authority should be heralded as a central purpose of higher education" (p. 166). However, when faculty come to expect that all students have order 4 abilities, many students find themselves in a learning environment where they are "in over their heads." Being in over one's head is not a pleasant experience; it is often accompanied by feelings of anxiety, frustration, doubt, and helplessness. These feelings are not conducive to learning.

It is important to note that meaning-making level is not the same as intellectual potential or ability. Meaning-making level is a developmental measure of how individuals organize their experience, which evolves over time. Stu-

dents at order 3 are not less intellectually capable than students at order 4. Learning difficulties experienced by order 3 meaning-makers in order 4 environments are not due to learning deficits; they are due to being at a different point in their meaning-making evolution than the environment demands.

Assessing Meaning-Making Order

Recall that Mike, the order 3 meaning-maker, was a graduate student and that Amanda, the order 4 meaning-maker, had recently graduated from a master's degree program. These individual case examples are representative of what Kegan (1994) found in his longitudinal research where he and his colleagues annually interviewed a sample of graduate students for four years. The research participants were interviewed and assessed using the Subject-Object Interview (Lahey and others, 1988), which is a measure of meaning-making development based on Kegan's model. The results showed that most students' meaning-making was predominantly at order 3 or in transition between orders 3 and 4 at the beginning of the four-year period and either in transition between orders 3 and 4 or predominantly at order 4 at the end of the four years. Kegan (1994) reviews the findings of several other studies measuring his developmental model, which also indicate that the story of adult development is the gradual transition from order 3 to order 4 meaning-making. These data also suggest that "at any given moment, around one-half to two-thirds of the adult population appears not to have fully reached the fourth order of consciousness" (p. 188).

Given these data, we can project that most traditional-aged undergraduate students and many non-traditional-aged undergraduates are either predominantly making meaning at order 3 or in transition from order 3 to order 4. Of course, this is not reflective of the meaning-making of any particular individual. To assess individual meaning-making, faculty must listen carefully to what students say about their understanding of their experiences, including how they make sense of learning experiences, their relationships with others, and themselves. In particular, faculty should listen to what individual students describe as needed support from faculty. This provides one avenue for assessing meaning-making order and, simultaneously, considering what a particular student expects from faculty.

I interviewed student affairs interns and professionals about what they thought they needed from their supervisors to feel supported in their work (Ignelzi, 1994). Though the relationship between supervisors and supervisees is somewhat different from those between faculty and students, there are some commonalities regarding the basic learning and teaching process evident in both types of relationships.

Stephanie, an order 3 meaning-maker, stated that she needed her supervisor to validate that she was doing things right and in a way that her supervisor liked:

There are some times I just need to go in and just have her validate that what I'm doing is OK or I'm on the right track. It's just nice to run by what I'm doing and know that there's support there. That she, you know, that she's agreeing, that what I'm doing is good. . . . I feel comfortable knowing that there's, that she's supporting what I'm doing and that she's listening and that she seems excited about what I'm doing, that she likes my answers or my directions, what I'm coming up with [p. 130].

Sam, a transitional order 3–4 meaning-maker, appreciated that his supervisor allowed him the freedom to do things differently but still relied on his supervisor's feedback to evaluate himself:

Aside from him being available and interested, the part that's nicest is that he'll allow you to try something different. . . . He comes from the frame of mind that, you know, if you can find a better way to do it, then do it your way. . . . I think as long as the end result is the same, he'll let you take whatever path you feel most comfortable with to get there. . . . And he gives me ongoing feedback. . . . I haven't had any surprises from him really in terms of how I've been performing. . . . That's important to me [p. 158].

Sarah, an order 4 meaning-maker, discussed how her view of her supervisor had changed to a collegial one:

I guess I've come to see that I do the work I do; I take feedback from her, and some of the feedback she's given me has been very helpful. At the same time, I know that we're all working in this together, and she's had some more experience . . . but what I have to say is also very important and has worth. . . . I see us as very much like equals, in that we're dealing with the same situations. . . . She has some different responsibilities than I do, but it still comes back to we're all colleagues [p. 205].

As these three interview excerpts demonstrate, the way individuals view their relationship with their supervisors and what they want from their supervisors can be quite different and is influenced by meaning-making order. Translating this material to the learning and teaching context, it can be projected that these individuals would view the role of faculty differently as well. Stephanie would want a great deal of feedback and validation from her professor as she relies on external sources in helping her co-construct her views of knowledge and herself as learner. Sam wants to have some limited autonomy to try new approaches to learning as his own internal self-standards are developing, but he would still need instructor feedback to help him monitor and evaluate his performance. Sarah has reconstructed her view of the teacher-learner relationship to fit her sense of self-authorship, viewing the professor as peer and colleague in the learning endeavor.

Supporting Development Toward Self-Authorship

If, as suggested earlier, a central goal of higher education should be the achievement of self-authorship, how can faculty encourage its development while not contributing to students' experience of being "in over their heads"? In other words, how can faculty provide appropriate support and challenge that will facilitate the developmental transition from order 3 to order 4 meaning-making? Returning to the earlier "farm" metaphor may provide some guidance.

1. *Visit and appreciate the other people's farm before trying to get them to consider moving to that new farm up the road.* Supporting someone's development first requires comprehending and valuing how the other person currently understands his or her experience. Kegan (1982) suggests that to be of effective help to another, we need to be able to communicate that we understand how it is for them. This act creates the interpersonal connection that is so important to order 3 meaning-makers: to feel supported by the external sources with whom they currently co-construct their meaning.

2. *Give the students good directions on how to get to the new farm or, better still, accompany them on the trip.* Giving students tasks that require order 4 meaning-making while providing them with little structure, guidance, or support does not facilitate becoming self-authored. A professor cannot tell students how to become self-authored in their learning but can provide learning experiences that provide incrementally-structured supervised practice in moving toward generating one's own ideas and theories about course material. Critical thinking exercises, ethical dilemma discussions, and journal writing are all valuable teaching methods in this process.

3. *Encourage students to travel together to visit the new farm.* Group work is a powerful developmental tool in facilitating movement from order 3 to order 4 meaning-making. The process of the developmental transition between order 3 and 4 is one of slowly creating and distinguishing one's own view from the view that is co-constructed with others. Students placed in learning groups will likely be at different points in this developmental process. As they work on tasks together, those closer to order 4 meaning-making will assert their more self-authored views and encourage their peers to articulate and assume responsibility for their own.

4. *Provide opportunities for celebrating the move to the new farm and reminiscing about leaving the old one.* The move toward self-authorship should be reinforced and celebrated as it progresses, through appropriate feedback, evaluation, and congratulatory acknowledgments. Likewise, students should be given opportunities to reflect on their thoughts and feelings about leaving the comfort of co-constructing the self to the somewhat frightening order 4 recognition that one is in charge of and responsible for one's own experience and self-construction. The transition to self-authorship involves reconstruction not only of how the self makes meaning of knowledge but

also of how the self makes meaning of relationships with others and the self. Fears about losing one's relational and psychological connection with others are perceived as real and need to be contradicted by important others (faculty, peers, family) standing by and with the student through this developmental transition.

The collegiate environment provides more developmental challenge (and demands) than support for students navigating the transition to self-authorship. Therefore, it is important for faculty to ensure that adequate support is also provided. Kegan (1994) asserts that educators must be about building developmental bridges that are *meaningful* to the students' current meaning-making and *facilitative* of a more complex way. He states, "We cannot simply stand on our favored side of the bridge and worry or fume about the many who have not yet passed over. A bridge must be well anchored on both sides, with as much respect for where it begins as for where it ends" (p. 62).

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MICHAEL IGNELZI is assistant professor of counseling and educational psychology and graduate program coordinator for student personnel at Slippery Rock University in Slippery Rock, Pennsylvania.